

Amendments to the Claims

Claims 1-20 (Cancelled).

Claim 21 (Previously presented): A method of transmitting data between a device and a communications channel interface, comprising:
communicating a request for the data from the device to the communications channel interface;
determining a type of data being requested;
accessing the data within a communications channel by the communications channel interface
using a communication protocol that defines a position of the data within a structured
linear database based on the type of data being requested;
transmitting the data from the communications channel interface to the device.

Claim 22 (Previously presented): The method of transmitting data between a device and a communications channel interface of claim 21 wherein the step of transmitting is transmitting using radio frequency over a hard-wired medium.

Claim 23 (Previously presented): The method of transmitting data between a device and a communications channel interface of claim 21 wherein the step of transmitting is transmitting using a radio frequency system over a wireless medium.

Claim 24 (Previously presented): The method of transmitting data between a device and a communications channel interface of claim 21 wherein the step of transmitting is transmitting using an ultra wideband radio frequency system over a hard-wired medium.

Claim 25 (Previously presented): The method of transmitting data between a device and a communications channel interface of claim 21 wherein the step of transmitting is transmitting using an ultra wideband radio frequency system over a wireless medium.

Claim 26 (Previously presented): The method of transmitting data between a device and a communications channel interface of claim 21 wherein the step of transmitting is transmitting using a fiber optic medium.

Claim 27 (Previously presented): The method of transmitting data between a device and a communications channel interface of claim 21 wherein the step of accessing data with the linear database protocol is accessing data based on pulse position information associated with the type of data being requested.

Claim 28 (Previously presented): The method of transmitting data between a device and a communications channel interface of claim 21 wherein the data includes streaming data.

Claim 29 (Previously presented): The method of transmitting data between a device and a communications channel interface of claim 21 wherein the data includes non-streaming data.

Claim 30 (Previously presented): The method of transmitting data between a device and a communications channel interface of claim 25 wherein the ultra wideband radio frequency transmission system uses variable pulse characteristics to represent data.

Claim 31 (Previously presented): The method of transmitting data between a device and a communications channel interface of claim 25 wherein the ultra wideband radio frequency transmission system uses variable spaces between pulses to represent data.

Claim 32 (Previously presented): The method of transmitting data between a device and a communications channel interface of claim 21 wherein the structured linear database protocol uses at least one structured linear database comprising a linear file allocation table including a field name for one or more subdivisions of data, pulse start and end position information for each of the field names.

Claim 33 (Previously presented): The method of transmitting data between a device and a communications channel interface of claim 32 wherein the at least one structured linear database contains at least one telecommunication data packet.

Claim 34 (Previously presented): The method of transmitting data between a device and a communications channel interface of claim 21 wherein the structured linear database protocol uses a plurality of structured linear databases.

Claim 35 (Previously presented): The method of transmitting data between a device and a communications channel interface of claim 21 wherein the structured linear database contains a plurality of telecommunication data packets.

Claim 36 (Previously presented): The method of transmitting data between a device and a communications channel interface of claim 32 wherein the structured linear database is variable in length.

Claim 37 (Previously presented): The method of transmitting data between a device and a communications channel interface of claim 32 wherein the telecommunication data packets are variable in length.

Claim 38 (Previously presented): The method of transmitting data between a device and a communications channel interface of claim 32 wherein one structured linear database is equivalent in duration to one telecommunication data packet.

Claim 39 (Previously presented): A method for communications over a hard-wired medium, comprising:
receiving a data transmission transmitted using ultra wideband over a hard-wired medium;
accessing data within the transmission using a communication protocol that defines a time position of data within the data transmission based on type of data.

Claim 40 (Previously presented): The method of claim 39 wherein the communication protocol defines the position of data within the data transmission in a one-dimensional format such that pulse start information and pulse end information for a data field is used to decode data from the data transmission.

Claim 41 (Previously presented): The method of transmitting data between a device and a communications channel interface of claim 21 wherein the step of transmitting is transmitting using an ultra wideband radio frequency system on a traditional RF carrier over a wireless medium.

Claim 42 (Previously presented): The method of transmitting data between a device and a communications channel interface of claim 21 wherein the step of transmitting is transmitting using an ultra wideband radio frequency system on a traditional RF carrier over a hard-wired medium.

Claim 43 (Previously presented): The method of claim 21, wherein the ultra-wideband signals representative of data comprise a multiplicity of pulse position modulated signals.

Claim 44 (Previously presented): The method of claim 21, wherein the ultra-wideband signals representative of data are modulated at a variable pulse rate frequency.

Claim 45 (Previously presented): The method of claim 21, wherein the ultra-wideband signals representative of data are modulated at a pseudo-random pulse rate frequency.

Claim 46 (Previously presented): The method of claim 21, wherein the communication signal is used to transmit data selected from the group consisting of: telephony data, high-speed data, digital video data, digital television data, Internet communication data and audio data.

Claim 47 (Previously presented): A method of transmitting and receiving data through a combination fiber and non-fiber hardwired network for data, the method comprising the steps of:

providing a combination fiber and non-fiber hard-wired network for data; combining a multiplicity of ultra-wideband signals representative of data with a combination fiber and non-fiber hard-wired network for data carrier signal prior to a signal transmission; receiving a combined signal comprising the multiplicity of ultra-wideband signals representative of data and the combination fiber and non-fiber hard-wired network for data carrier signal; and separating the combined signal into the multiplicity of ultra-wideband signals representative of data and the combination fiber and non-fiber hard-wired network for data carrier signal.

Claim 48 (Previously presented): The method of claim 47, wherein the network for data carrier signal is used to transmit data selected from the group consisting of: telephony data, high-speed data, digital video data, digital television data, Internet communication data and audio data.

Claim 49 (Previously presented): The method of claim 47, wherein the ultra-wideband signal is used to transmit data selected from the group consisting of: telephony data, high-speed data, digital video data, digital television data, Internet communication data and audio data.

Claim 50 (Previously presented): The method of claim 47, wherein the ultra-wideband signal and the combination fiber and non-fiber network for data carrier signal use separate portions of an electromagnetic radiation spectrum.

Claim 51 (Previously presented): The method of claim 47, wherein the ultra-wideband signal and the combination fiber and non-fiber network for data carrier use substantially common portions of an electromagnetic radiation spectrum.